

This listing of claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS

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1. (Currently Amended) A device for treating mucositis in a patient, the device comprising:
- a housing positioned adjacent to the patient;
  - a plurality of optoelectronic devices positioned within the housing, the optoelectronic devices emitting radiation having at least a threshold light intensity approximately equal to an energy density of the emitted radiation divided by a radiation time period, the optoelectronic devices emitting radiation at a wavelength suitable for the treatment of mucositis while emitting a minimal amount of heat; and
  - a cooling system that cools the optoelectronic devices.
2. (Original) The device of claim 1, wherein the plurality of optoelectronic devices include a plurality of light-emitting diodes.
3. (Original) The device of claim 1, wherein the plurality of optoelectronic devices are positioned within the housing in an array, and wherein the array includes optoelectronic devices emitting radiation at a wavelength of at least one of approximately 670 nanometers, 680 nanometers, 730 nanometers, 780 nanometers, 830 nanometers, and 880 nanometers.
4. (Original) The device of claim 1, wherein the plurality of optoelectronic devices emit radiation at a wavelength of approximately 688 nanometers.
5. (Currently Amended) The device of claim 1, wherein the plurality of optoelectronic devices emit radiation having an energy density of approximately 4 Joules per centimeter squared.

6. (Currently Amended) The device of claim 1, wherein the ~~plurality of optoelectronic devices emit radiation having a~~ threshold light intensity ~~is~~ of approximately 60 milli-Watts per centimeter squared.

Claim 7 (Cancelled).

8. (Original) The device of claim 1, wherein a translucent cover plate is disposed between the housing and the plurality of optoelectronic devices to electrically isolate the patient from the plurality of optoelectronic devices.

9. (Original) The device of claim 1, wherein the cooling system includes a plurality of air vents in the housing and an internal heat sink positioned within the housing.

Claims 10-14 (Cancelled).

15. (Original) The device of claim 1, wherein the device is a mobile lamp.

Claims 16-85 (Cancelled).

86. (New) A method of treating mucositis in a patient, the method comprising:  
positioning a housing adjacent to a patient, the housing including a plurality of  
optoelectronic devices;

irradiating the patient with radiation emitted by the plurality of optoelectronic devices for  
a time period approximately equal to an energy density of the emitted radiation divided by a light  
intensity of the emitted radiation, the emitted radiation having a wavelength suitable for the  
treatment of mucositis; and

dissipating the heat produced by the plurality of optoelectronic devices.

87. (New) The method of claim 86, and further comprising irradiating the patient with  
radiation emitted by the plurality of optoelectronic devices for at least approximately 70 seconds.

88. (New) The method of claim 86, and further comprising irradiating the patient with  
radiation at a wavelength of approximately 670 nanometers to approximately 880 nanometers.

89. (New) The method of claim 88, and further comprising irradiating the patient with  
radiation at a wavelength of approximately 688 nanometers.

90. (New) The method of claim 86, and further comprising irradiating the patient with  
radiation having an energy density of approximately 4 Joules per centimeter squared.

91. (New) The method of claim 86, and further comprising irradiating the patient with  
radiation having a light intensity of approximately 60 milli-Watts per centimeter squared.

92. (New) The method of claim 86, and further comprising positioning the housing  
adjacent to a sore on the patient's skin.

93. (New) The method of claim 86, and further comprising positioning the housing  
adjacent to the patient's cheek in order to irradiate a sore in the patient's mouth.

94. (New) The method of claim 86, and further comprising positioning the housing  
adjacent to the patient's torso in order to irradiate a sore in the patient's gastrointestinal system.

95. (New) The method of claim 86, and further comprising electrically isolating the patient from the optoelectronic devices.

96. (New) The method of claim 86, and further comprising collimating the radiation emitted by the optoelectronic devices into substantially parallel rays.

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